

WELLS-GARDNER®
ELECTRONICS CORPORATION

MODEL 13K7203

MODEL 19K7203



REPLACEMENT PARTS LIST

Main, Neck & Control PCB Assembly Parts List

DIODES		
DESIGNATION	DESCRIPTION	PART NO.
D001	DIODE BYT54M 1KV	2ARAD0054-001
D002, D003, D501	DIODE FF1003	2ARAD1003-001
D101, D102	DIODE BYV36D 800V	2ARHD0036-001
D103, D104, D105, D603, D604	DIODE RECT 400V 2A HER205	2ARAD0205-001
D301, D302, D303, D304, D305, D306, D307, D308, D309, D311, D312, D402, D403, D605, D004	DIODE SW 1N4148	2ARAD4148-001
D401	RECTIFIER 1N4002	2ARAD4002-001
D502	DIODE HER 104	2ARAD0104-001
D503	DIODE ULTRAFAST 200V 1A	066X0130-001
D601	DIODE DAMPER 1400V 3 AMP	066X0125-001
D602	DIODE FUF5407 FAST REC 3A	2ARAD5407-001
D801, D802, D803	SANYO GMA02	066X0062-001
D804	DIODE HER 104	2ARAD0104-001
ZD001	DIODE ZENER 36V	2ARAZ0859-091
ZD101	ZENER DIODE 6.8V 5% 0.5W	066X0040-018
ZD401	DIODE ZENER 3.2 - 3.4V .5W	2ARAZ0859-062

INTEGRATED CIRCUITS		
DESIGNATION	DESCRIPTION	PART NO.
U001	IC PWM UC3842AN	086X0257-001
U101	IC MC7805ACT REG 5V	2ARHI7805-001
U102	IC 3 PN REGULATOR 12V 1A	2ARHI7812-001
U301	IC 28 PIN MM 1203N MITSUM	2ARHI1203-002
U401	IC 15 PIN TDA 1675A	2ARHI1675-001
U501	IC LA7850 HV SYNC PROC S	086X0274-001

TRANSFORMERS		
DESIGNATION	DESCRIPTION	PART NO.
L001	CHOKE 0.7UH	2ASAC7414-079
L601	COIL 1.3 MH LTE-990053	2ASVC0016-001
L602	LINEARITY COIL 19" (SVC0017-002)	009A3017-001
L603	COIL 7 MH LTE-990055	2ASVC0018-001
T103	PWR TRANS E1-45 LTE-99051 (PWR TRANS ER-4215 CORE)	2ATSD1200-001
T501	DRV TRANS E1-19V LTE-99052	2ATDA0001-001
T601	PWR FBT MERITRON CT-8584	2ATFT1415-002

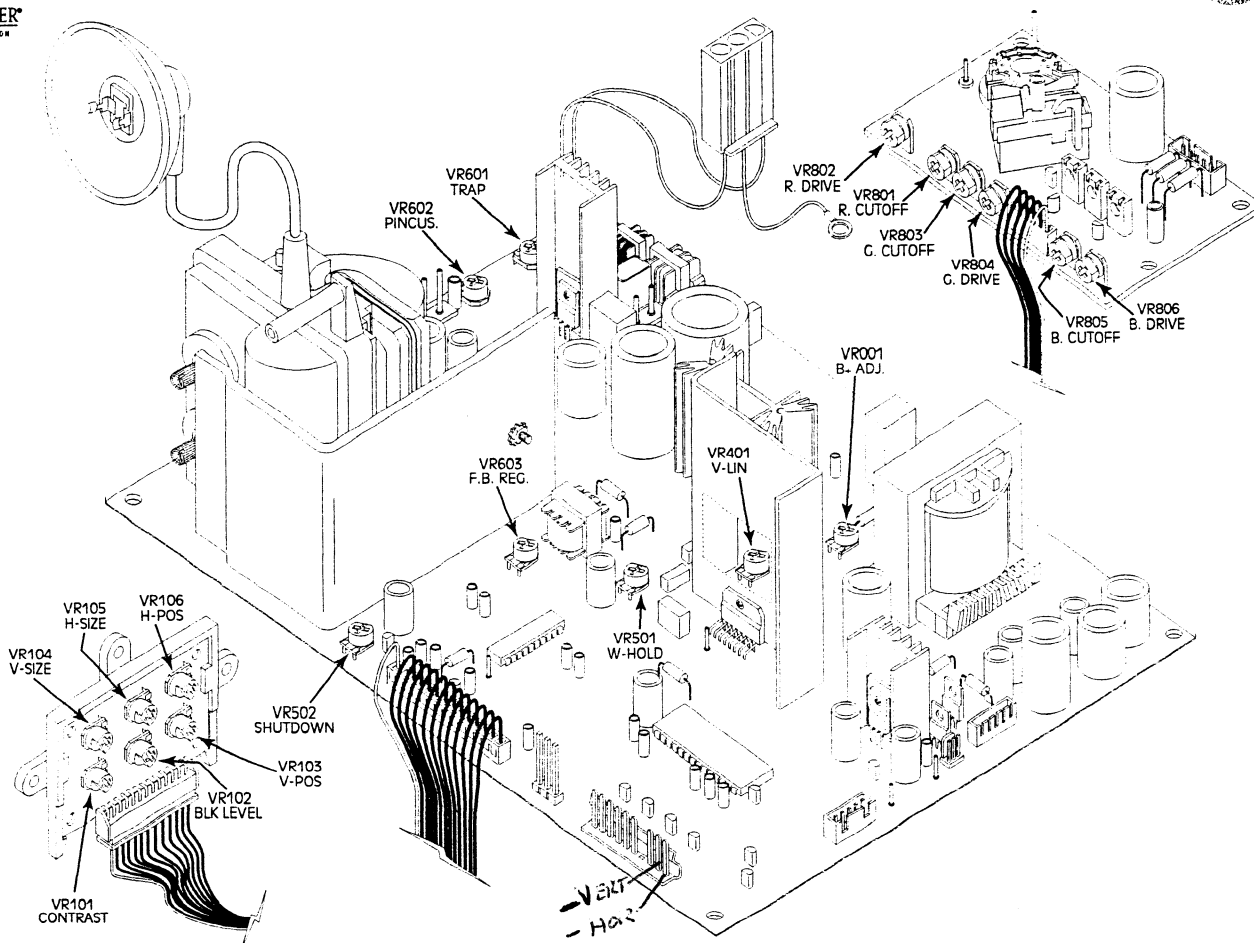
TRANSISTORS		
DESIGNATION	DESCRIPTION	PART NO.
Q001	TRSTR PNP BF423	2ARAP0423-001
Q002	TRSTR FET 2SK2645 FUJI	2ARAM2645-001
Q101	TRSTR 2SD525R	086X0074-001

TRANSISTORS (cont.)		
DESIGNATION	DESCRIPTION	PART NO.
Q301, Q302, Q303, Q304, Q306, Q308, Q309, Q601, Q604	TRSTR 2N3904 MOT	086X0113-501
Q305, Q802, Q804, Q806	TRSTR 2SC945P NEC NPN	2ARAN0945-001
Q307, Q501, Q505	TRSTR PNP 2SA733 QP NEC	2ARAP0733-001
Q401	TRSTR 2SC1213	2ARAN1213-001
Q502	TRSTR 2SC2482 TOSH	086X0185-501
Q503	TRSTR NPN 2SC5297	2ARHN5297-001
Q602	TRSTR 2N3906 MOT	086X0114-501
Q603	TRSTR NPN 2SD669	2ARHN0669-001
Q801, Q803, Q805	TRSTR 2SC3953E NEC	2ARHN3953-001

VARIABLE POTENTIOMETERS		
DESIGNATION	DESCRIPTION	PART NO.
VR001, VR105	TRIM POT 5000 OHM 0.15W	040X0711-008
VR401, VR603	TRIM POT 100K OHM 0.15W	040X0711-013
VR102, VR501	TRIM POT 2000 OHM 0.15W	040X0711-006
VR101, VR106, VR502	TRIM POT 10K OHM 0.15W	040X0711-009
VR103	TRIM POT 30K OHM 0.15W	040X0711-011
VR601	TRIM POT 100 OHM 0.15W	040X0711-001
VR602	TRIM POT 50K OHM 0.15W	040X0711-012
VR104	TRIM POT 200K OHM 0.15W	040X0711-014
VR801, VR803, VR805	TRIM POT 2K OHM 20% 0.15W	2AMRT1202-002
VR802, VR804, VR806	TRIM POT 200 OHM 20% 0.15	2AMRT1201-002

MISCELLANEOUS		
DESIGNATION	DESCRIPTION	PART NO.
R005	RES 0.15 OHM 5% 2W MF	2AQHM2050-158
R009	RES 330 OHM 5% 2W MF	2AQHM2050-331
R100	RES 1K OHM 5% 3W MF	2AQHM3050-102
R102	RES 3.9 OHM 5% 3W MF/MO	340X6039-633
R105	RES .47 OHM 5% MF	2AQM1050-478
R420	RES 180 OHM 5% 1W MF	2AQHM1050-181
R422	RES 390 OHM 5% 1W MO/MF	340X4391-633
R520	RES 1.8K OHM 5% 1W MF	2AQHM1050-182
R602	RES 2.2K OHM 5% 1W MF	2AQHM1050-222
R603	RES 270 OHM 5% 3W MF	2AQHM3050-271
R625	RES 15 OHM 5% 5W CEMENT	2AQPE5050-150
TH001	NTC DSC 5D-11 5 OHM	2ARNT0511-509
TH002	PTC D6-14MA/18MA 14 OHM	2ARPT0614-001
CRT	CRT 13" SAMSUNG A34KQW42X01	088X0431-001
CRT	CRT 19" ORION A48JLL40X46 CQ	088X0413-506

See page 4 for component differences between 13" and 19".



AC INPUT CONNECTOR: J101

Molex type 19-09-2039
Mating Molex type 19-09-1039

Pin	Description
1	AC hot
2	Earth ground
3	AC neutral

INPUT SIGNAL CONNECTOR: P1/P2

JST type B10P-VR
Mating Molex type 09-50-7101

PC Connector Pin	Description	Mating Connector Pin
1	Red	10
2	Green	9
3	Blue	8
4	Gnd	7
5	+ Vertical Sync	6
6	+ Horizontal Sync	5
7	Key	4
8	Gnd	3
9	- Vertical Sync	2
10	- Horizontal Sync	1

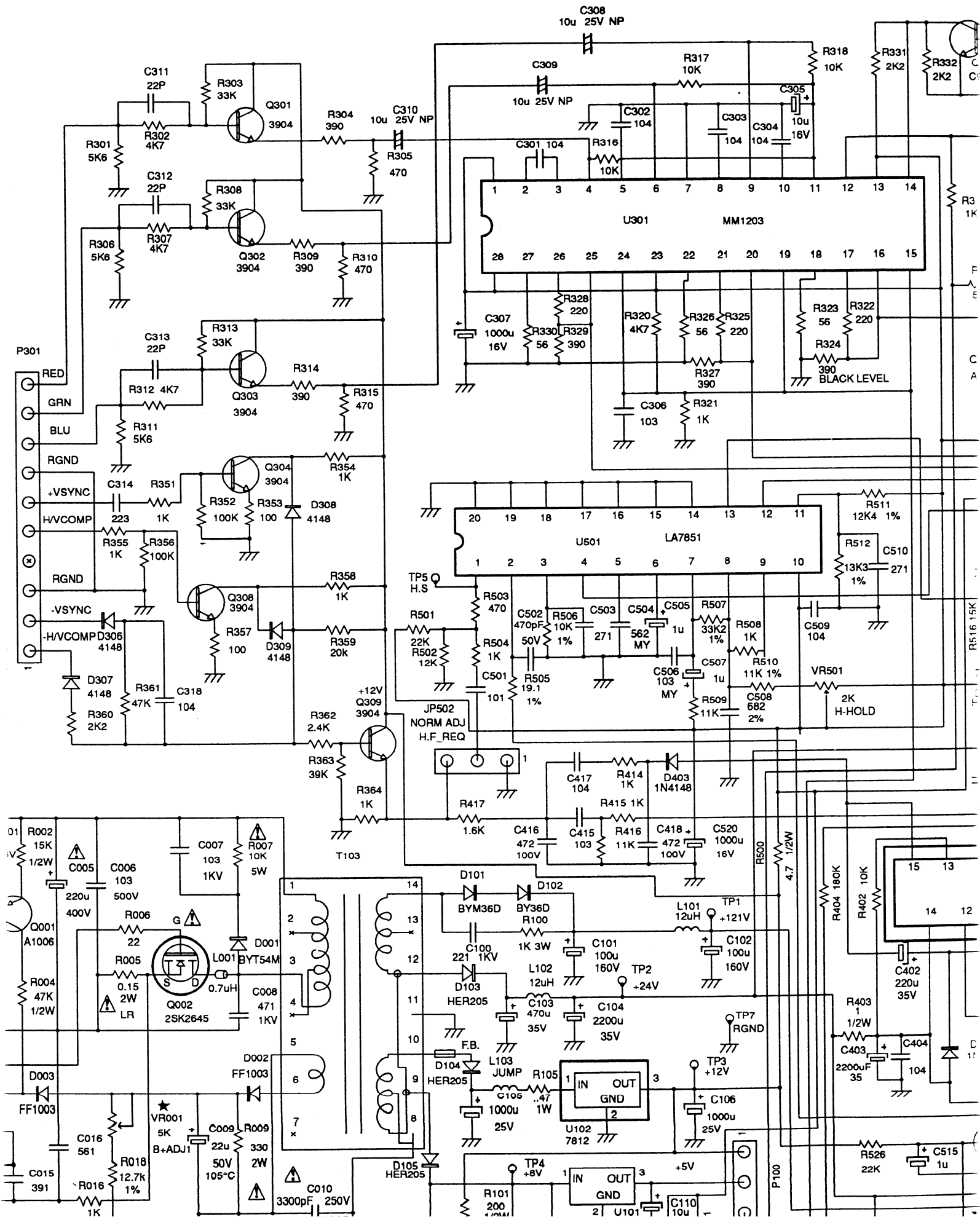
Component Differences between P819 and P859

P819 PCB RS 7200 REV "A" DEFL BRD (025A1523-001) 19"

P859 PCB RS K7200 REV "A" DF BD (0251615-001) 13"

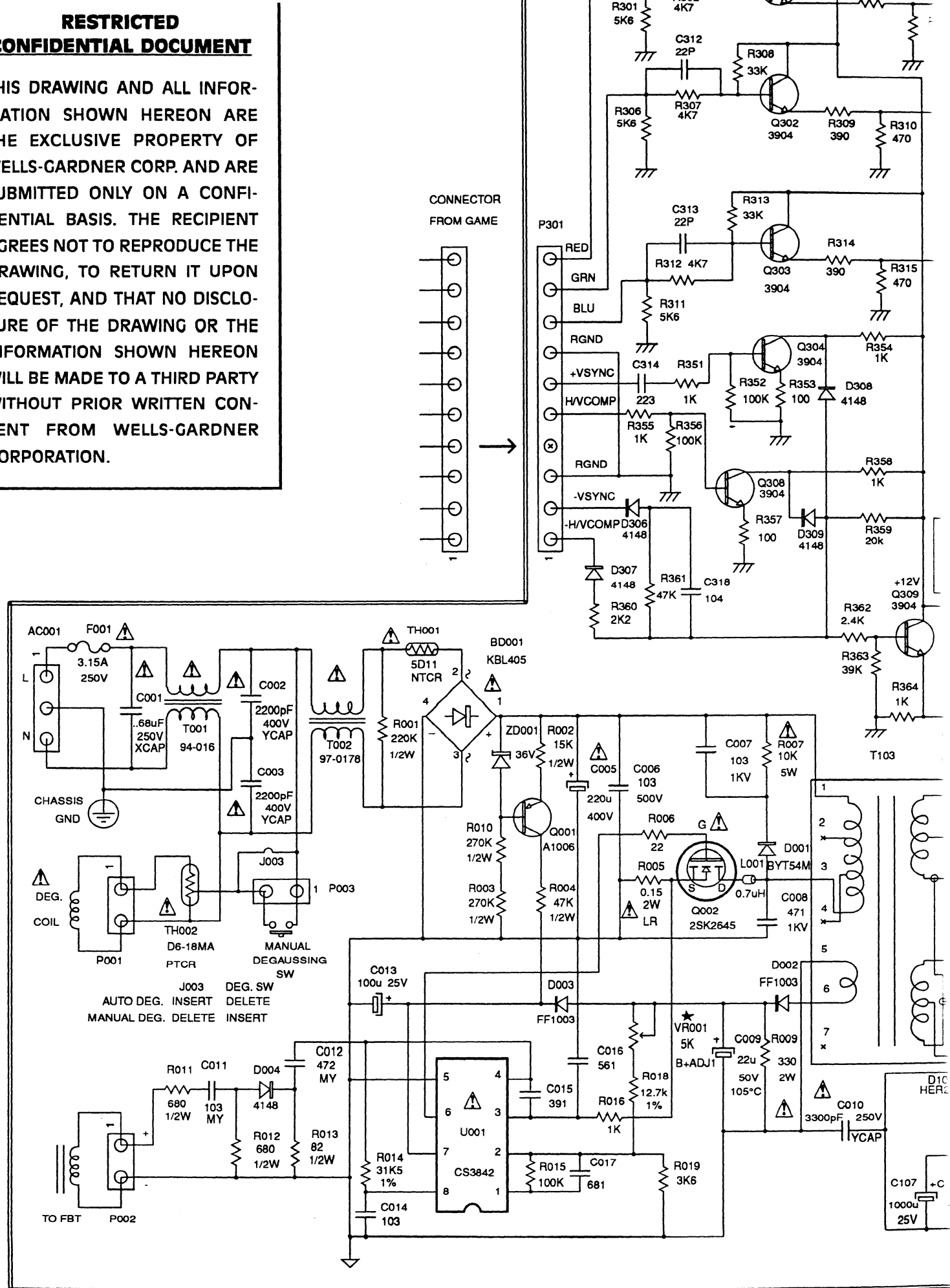
P 8 1 9		
DESIGNATION	DESCRIPTION	PART NO.
C601	CAP .68UF 5% 250V P-PROP	2APV3939-684
L602	LINEARITY COIL 19" (SVC 0017-002)	009A3017-001
R018	RES 12.7K OHM 1% 1/4W MF	421X1272-221
R505	RES 19.1K OHM 1% 1/4W MF	421X1912-221
R513	RES 10K OHM 5% 1/6W CF	2AQF0650-103

P 8 5 9		
DESIGNATION	DESCRIPTION	PART NO.
C601	CAP .39UF 5% 200V P-PROP	046X0536-046
L602	LINEARITY COIL 19" (SVC 0017-003)	009A3017-002
R018	RES 13.7K OHM 1% 1/4W MF	421X1372-221
R505	RES 16.5K OHM 1% 1/4W MF	421X1652-221
R513	RES 12K OHM 5% 1/6W CF	422X1123-132



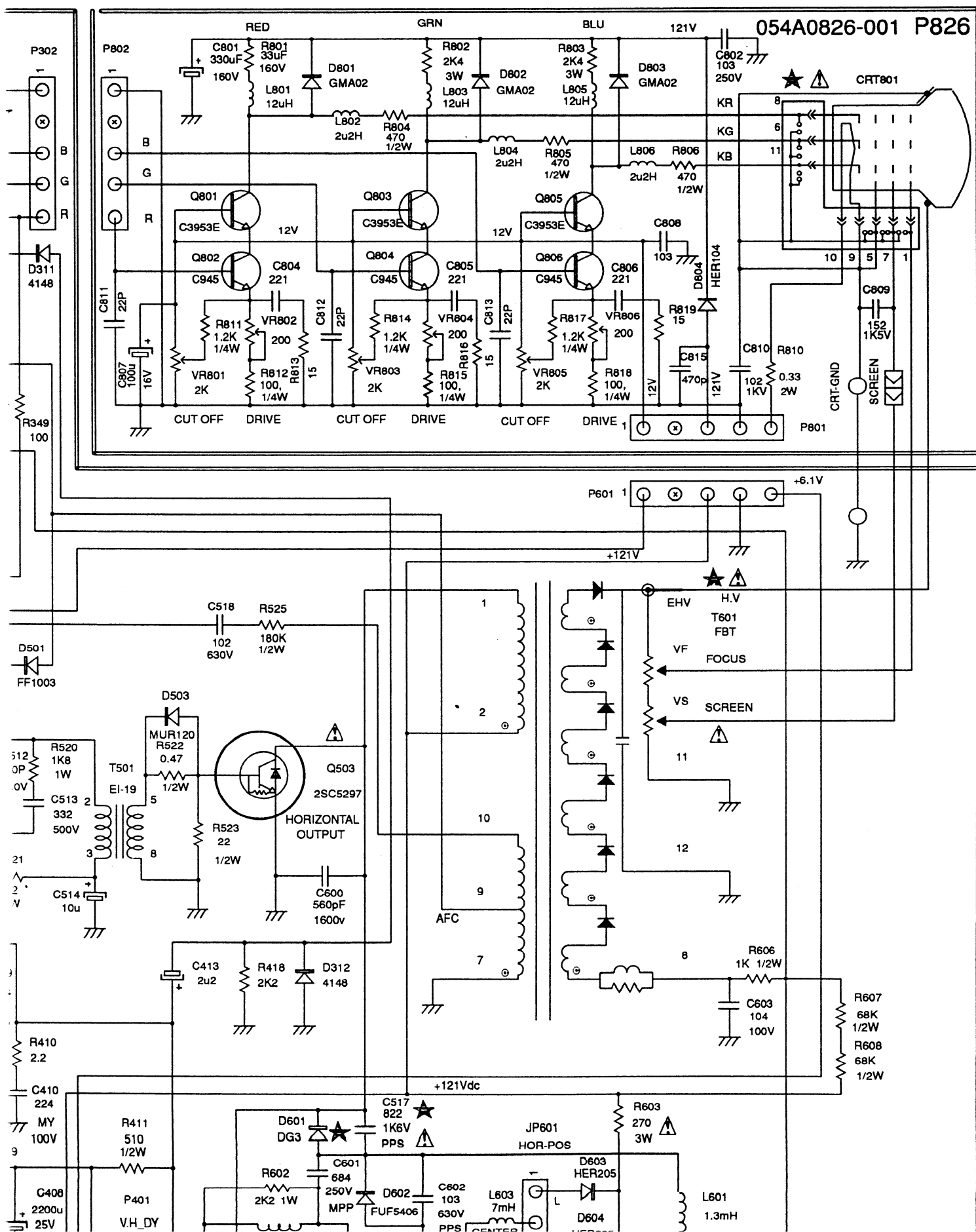
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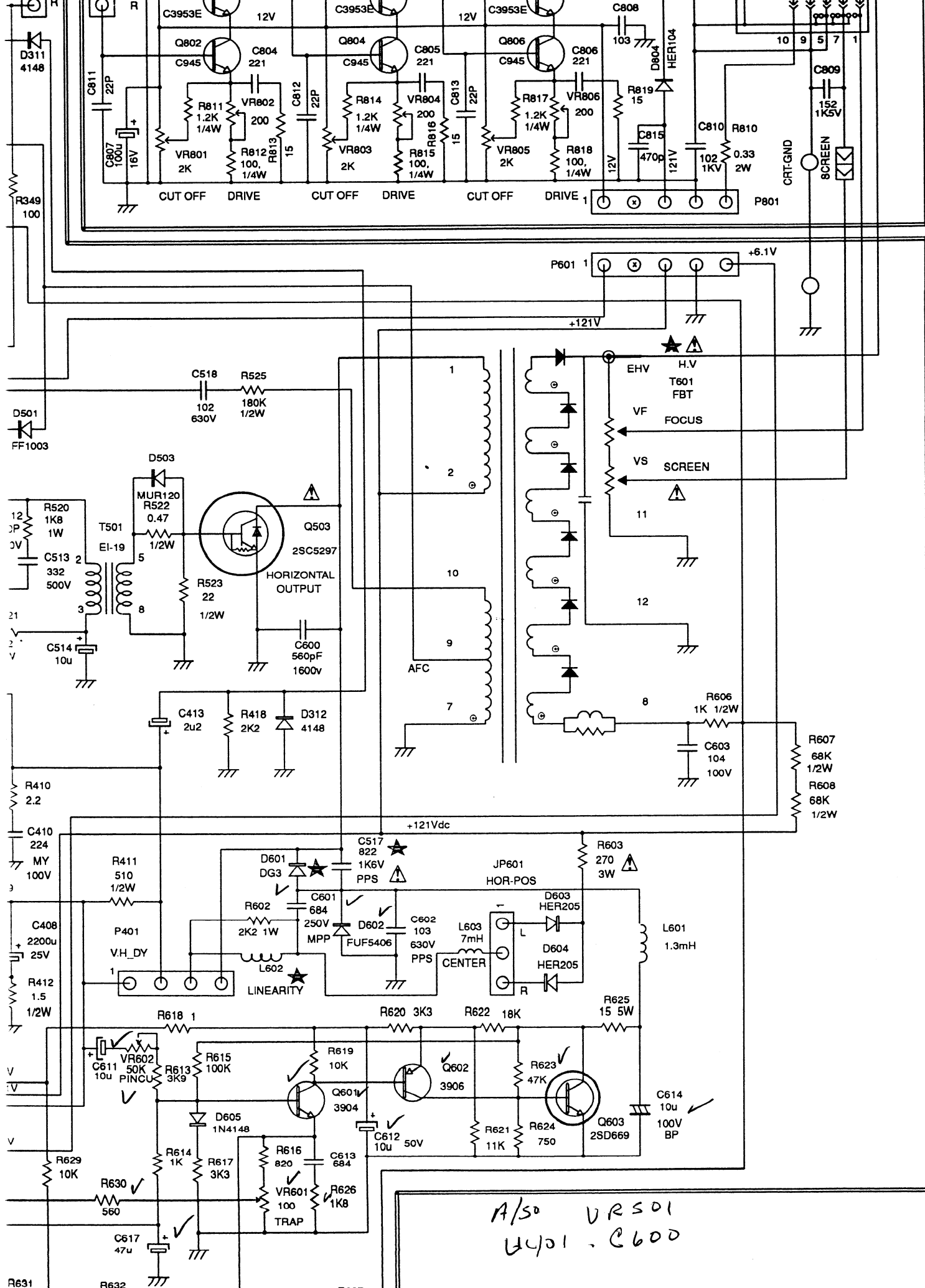
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NOTE: 1. THE UNIT OF RESISTANCE "OHM" IS OMITTED
(K-1000 OHMS AND M-1MEG OHMS)

CAUTION: SAFETY CRITICAL COMPONENTS





A/SO VRS01
U401 - C600

